

**Orange County Pharmacist Assessment
County of Orange Health Care Agency
Health Promotion Division
Safe Healthcare Project
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Background

While there is a recent survey from the Los Angeles County Department of Health's Health Authority Law Enforcement Task Force (HALT) regarding population use of illegal medications, information is limited within Orange County. Therefore, the Safe Healthcare project decided to conduct the Orange County Pharmacist Assessment. This assessment seeks to provide information regarding the pharmacists' perception of their clients illicit and illegal medication use within Orange County, including a selected area of underserved/low income Hispanic communities of Orange County, as well as the willingness of pharmacists to distribute information on the Safe Healthcare Project and safe medicines. The Safe Healthcare Project's goal is to provide health education training to professionals and community groups to encourage use of legitimate health care services and to educate the public about the dangers of prescription drugs from unlicensed providers. The project seeks to promote awareness through a variety of outreach activities and healthcare referral services including educational materials, health referral resources, and training.

For the purposes of the Pharmacist Assessment, surveys were distributed electronically to 300 members of the Orange County Pharmacists Association (Appendix A), and a select number of follow-up interviews will be conducted with Orange County pharmacists who work in underserved locations of Santa Ana. The initial survey data provides information regarding the pharmacists' awareness of Orange County residents use of illicit and illegal medications, as well as the pharmacists' willingness to make their clients aware of legitimate resources available within Orange County. Additional follow-up surveys will provide information regarding the communication/interaction practices of pharmacists with their clients and possible barriers they face in referring clients to Safe Healthcare services.

Results

A total of 58 pharmacists (19% response rate) responded to the initial survey distributed between November 2003 and February 2004. Eighty-four percent (84%) of the pharmacists have been in practice for over 10 years, and 61% of those pharmacists have also been practicing at their current locations for over 10 years. The majority of responses came from pharmacists in Santa Ana (24%), Westminster (12%), and Garden Grove (12%) (Appendix B, Table 1). It appears that a majority of pharmacists work in private pharmacies; however, due to incomplete data, this information is not presented.

One survey item used data from the California Health Interview Survey (CHIS), a telephone survey that uses a geographically stratified sample. The California Health Interview Survey (CHIS) is an important source of information on health and access to health care services, providing communities with a detailed picture of the health and health care needs facing California's diverse population. According to the 2001 CHIS, at least 56% of Orange County residents, ages 6 and older, have taken a vitamin, mineral, herbal, botanical, or other dietary supplement during the past month. In terms of the patients pharmacists serve, approximately 48% (27/56) believed this number was exactly right, 30% (17/56) believed this number was lower than expected and 21% (12/56) believed this number was higher than expected (Figure 1).

The interaction between the pharmacists and their patients regarding alternative medication use was another focus of the survey. Alternative medications include vitamins, minerals, herbals, botanicals, and/or other dietary supplements. Approximately 32% (18/57) of pharmacists stated they always ask their patients if they take alternative medications, whereas 65% (37/57) sometimes ask, and 4% (2/57) never ask their patients if they take alternative medications (Figure 2). Furthermore, 48% (28/58) of pharmacists sometimes ask their patients if they take medications from another country, while 43% (25/57) never ask their patients if they take medications from another country (Figure 3). Finally, 63% (36/57) of pharmacists reported that their patients disclose whether or not they take medications from other countries (Figure 4). Specific countries and types of medications were not specified in the survey.

In many countries, pharmacists can dispense medication without a prescription from a physician. Some of these medications are banned in the United States because of public health concerns about side effects. 61% (34/56) of pharmacists surveyed were aware of problems in Orange County with persons using illegal medications from other countries (Figure 5). When the pharmacists' awareness is cross-tabulated with their years of practice, 67% (6/9) of those practicing for less than 10 years were aware of the problems, compared to 55% (16/29) of pharmacists in practice for over 10 years. However, these differences were not statistically significant ($p > 0.05$).

The Orange County Health Care Agency's Safe Healthcare Project goal is to increase community awareness of safe and legitimate healthcare resources through community education. Approximately 98% of pharmacists believe that patients use them as a resource for medical/health information (Figure 6). Thus, it is encouraging to note that 95% of pharmacists were willing to distribute information on Safe Healthcare to their patients (Figure 7). When the pharmacists' willingness to distribute information was cross-tabulated with their years of practice, 100% (9/9) of those practicing for less than 10 years were willing to distribute information, compared to 93% (43/46) of pharmacists in practice for over 10 years. However, these differences were not statistically significant ($p > 0.05$).

Discussion

The information gained from the survey respondents will be used in the planning and development of future Safe Healthcare Project activities. These activities include the use of local pharmacists as conduits for safe low-cost resources and promoting the Orange County's health resource line.

Overall, it appears that the surveyed pharmacists are somewhat aware of the problems in Orange County with patients using medications from other countries. However, it is a matter of concern that only 32% of the surveyed pharmacists always ask patients if they take alternative medications, and only 9% always ask patients if they take medications from other countries. Because the pharmacists believe they play a large role in dispensing medical and health information, providing Safe Healthcare information to them is critical. Thus, an ongoing collaboration with participating pharmacists will be beneficial for distributing and reinforcing Safe Healthcare information to the public.

Future survey items that can strengthen the study include collecting information on the specific countries where medications are bought, the specific medications patients buy in other countries, the type of pharmacy (private or corporate) in which pharmacists work, and factors affecting whether or not a pharmacist asks a patient if he/she is taking alternative medications. A final analysis will be conducted once the follow-up interviews are conducted.

Figure 1.

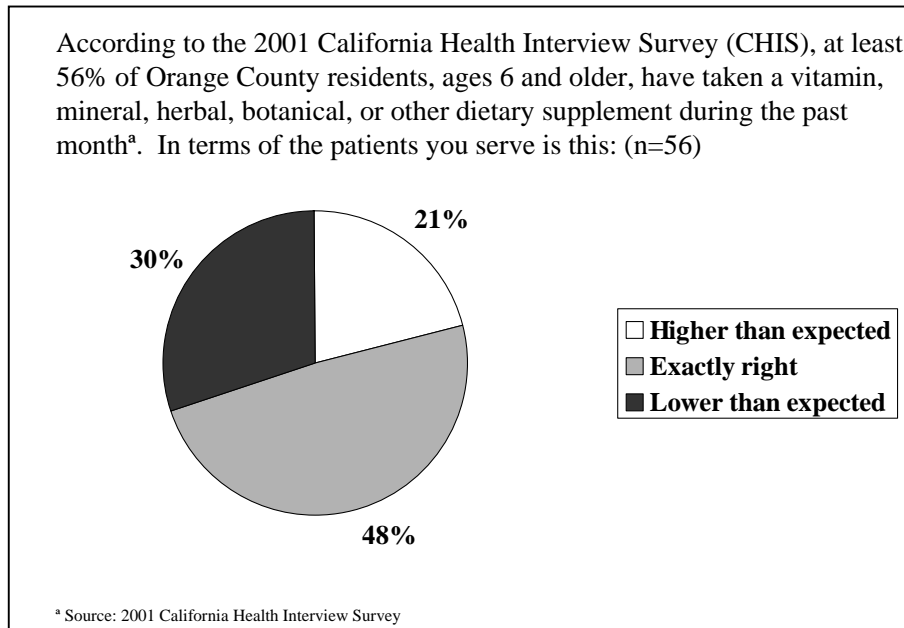


Figure 2.

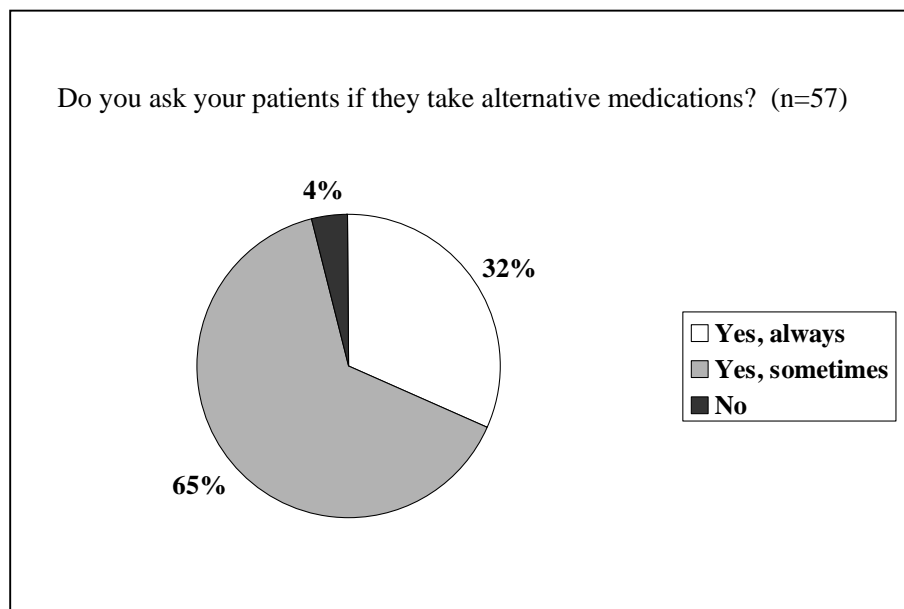


Figure 3.

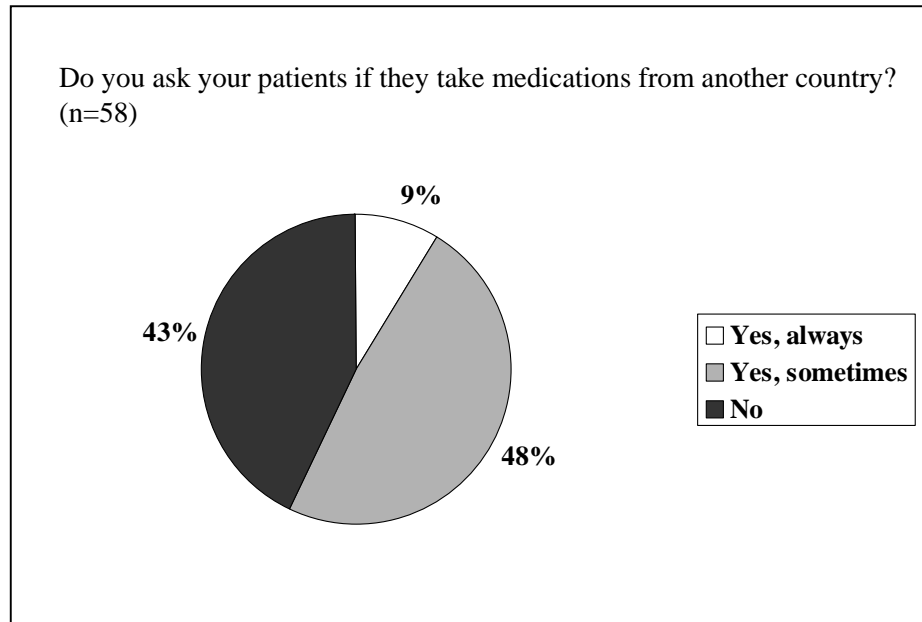


Figure 4.

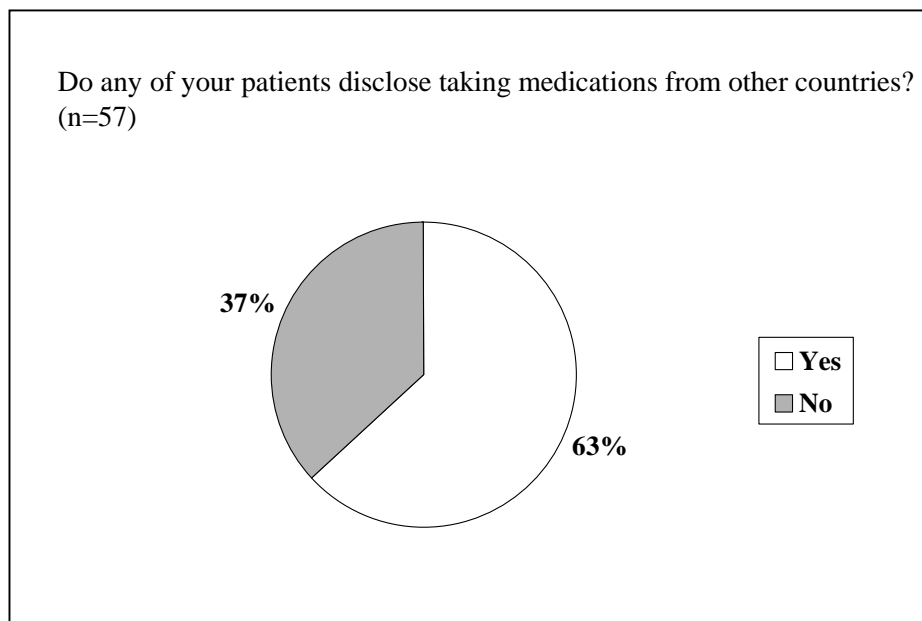


Figure 5.

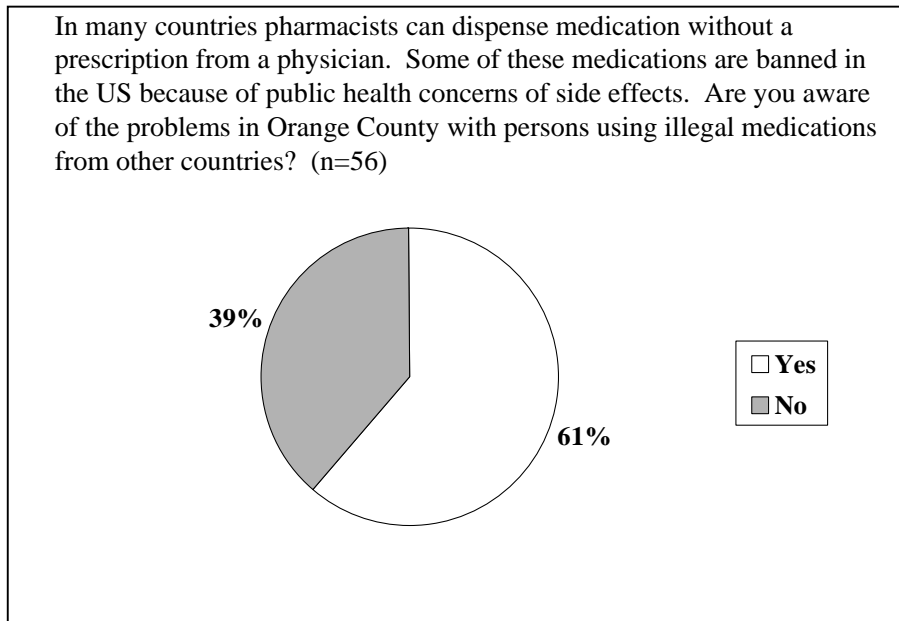


Figure 6.

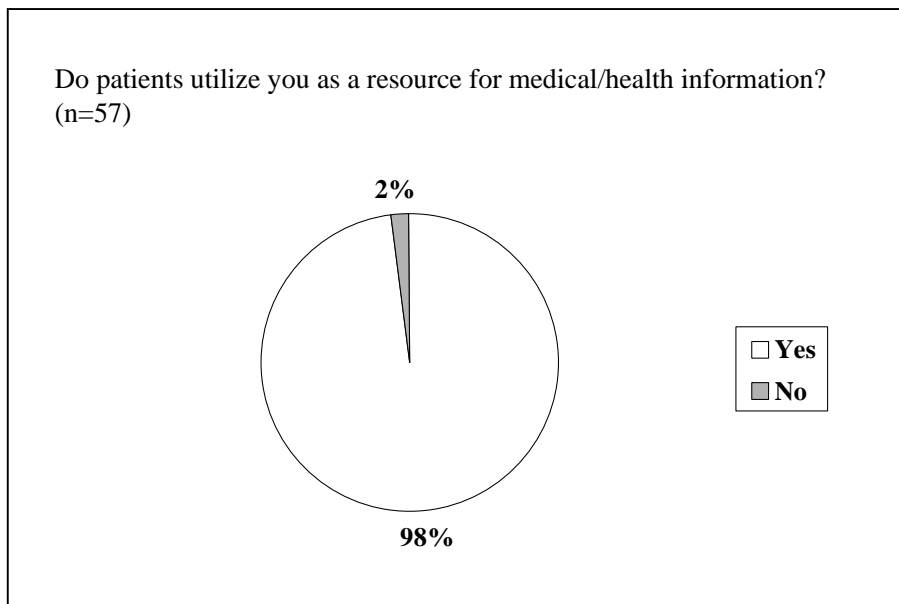
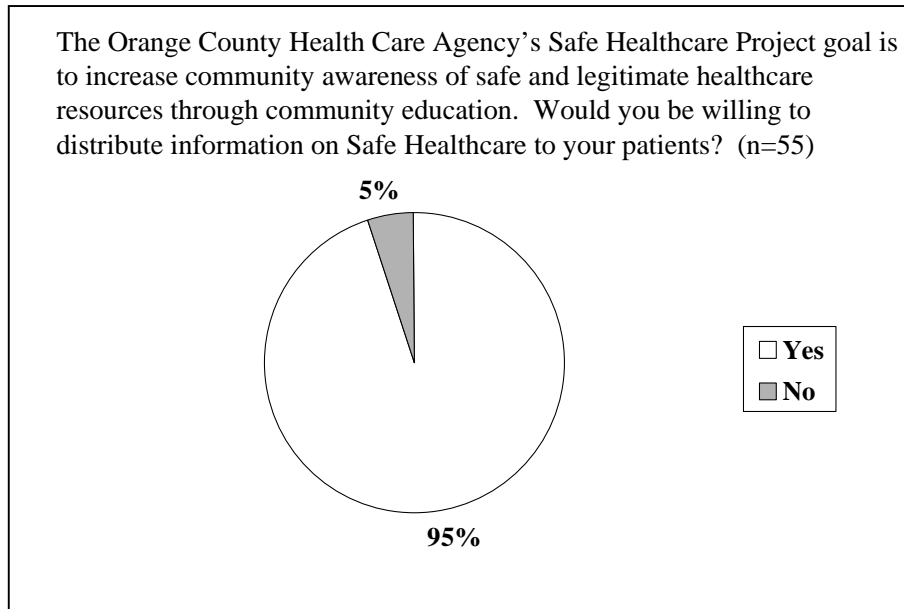


Figure 7.



Appendix A.



**County of Orange Health Care Agency
Safe Healthcare Project - Pharmacist Questionnaire**

Please fill-in your responses for items 1-2 and circle your responses for items 3-9.

1. How many years have you been practicing as a pharmacist? ____years
2. How many years have you been practicing at this location? ____years
3. According to the 2001 California Health Interview Survey (CHIS), at least 56% of Orange County residents, ages 6 and older, have taken a vitamin, mineral, herbal, botanical, or other dietary supplement during the past month. In terms of the patients you serve is this:
 - a. Higher than expected
 - b. Exactly right
 - c. Lower than expected
4. Do you ask your patients if they take alternative medications?
 - a. Yes, Always
 - b. Yes, Sometimes
 - c. No
5. Do you ask your patients if they take medications from another country?
 - a. Yes, Always
 - b. Yes, Sometimes
 - c. No
6. Do any of your patients disclose taking medications from other countries?
 - a. Yes
 - b. No
7. Do patients utilize you as a resource for medical/health information?
 - a. Yes
 - b. No
8. In many countries pharmacists can dispense medication without a prescription from a physician. Some of these medications are banned in the US because of public health concerns of side effects. Are you aware of the problems in Orange County with persons using illegal medications from other countries?
 - a. Yes
 - b. No
9. The Orange County Health Care Agency's Safe Healthcare Project goal is to increase community awareness of safe and legitimate healthcare resources through community education. Would you be willing to distribute information on Safe Healthcare to your patients?
 - a. Yes
 - b. No

10. If you are willing to distribute information please leave your contact information below as well as the best time to reach you:

Name: _____

Address: _____

City _____ Zip Code _____

Telephone: _____

Best time to reach you: _____AM/PM

Thank you for participating in this survey. Please mail the completed survey using the self-addressed envelope.

Appendix B

Table 1. Pharmacist location of practice (n = 51).

City/State	Frequency	Valid Percent	Cumulative Percent
Anaheim CA	3	5.9	5.9
Brea CA	1	2.0	7.8
Costa Mesa CA	2	3.9	11.8
Fountain Valley CA	2	3.9	15.7
Fullerton CA	1	2.0	17.6
Garden Grove CA	6	11.8	29.4
Huntington Beach CA	2	3.9	33.3
Irvine CA	1	2.0	35.3
La Habra CA	1	2.0	37.3
Laguna Beach CA	1	2.0	39.2
Lake Forest CA	1	2.0	41.2
Mission Viejo CA	2	3.9	45.1
Newport Beach CA	1	2.0	47.1
Orange CA	3	5.9	52.9
Placentia CA	2	3.9	56.9
Santa Ana CA	12	23.5	80.4
Tustin CA	2	3.9	84.3
Westminster CA	6	11.8	96.1
Yorba Linda CA	2	3.9	100.0
Total	51	100.0	